

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P252269

Luminaire Tested: **LD6B20D010 EU6B10209727 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252269
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10209727 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1345.0 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

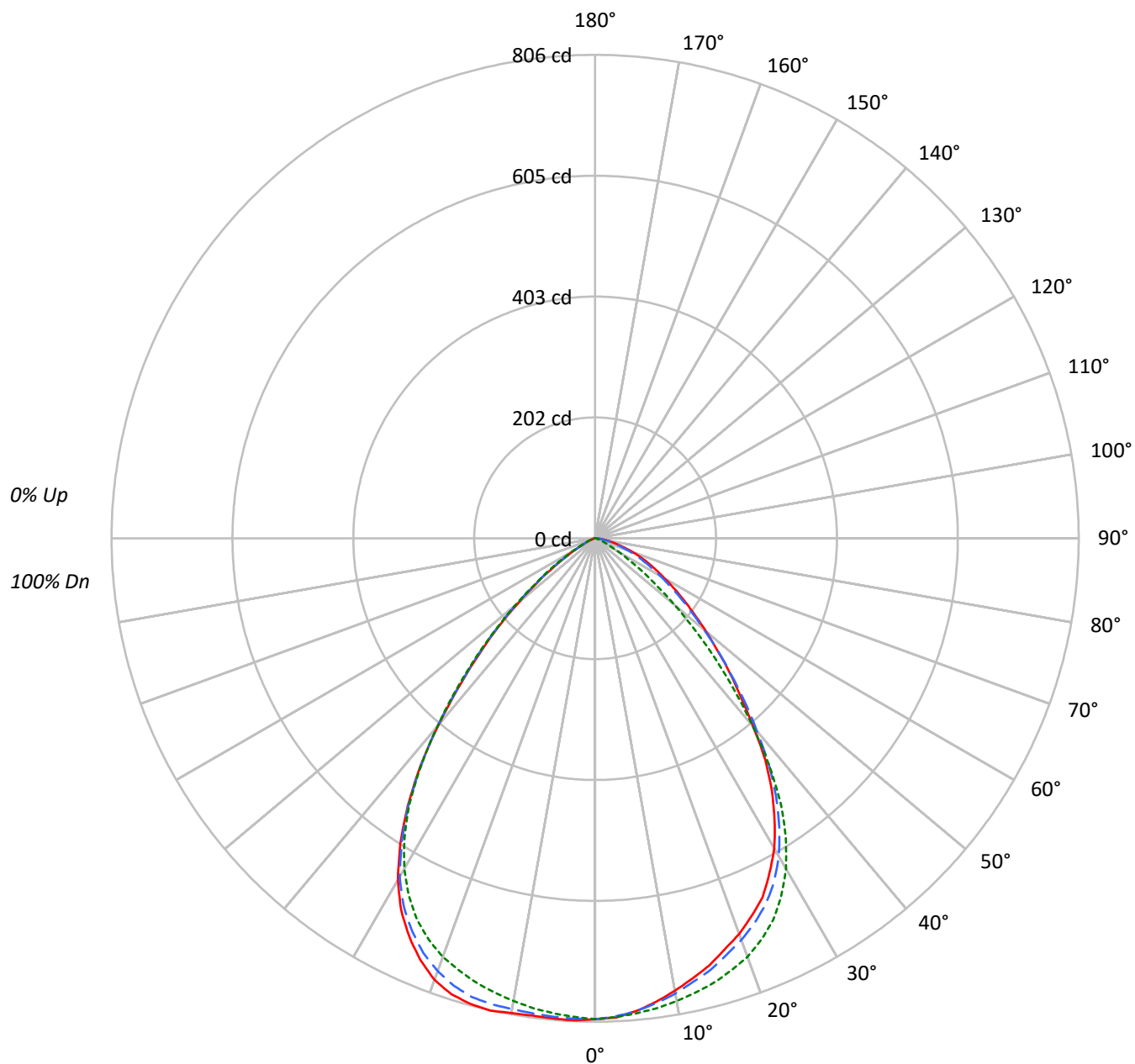
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	52303	52303	52303
5°	51809	52058	52628
10°	50739	51891	53236
15°	49765	51791	54277
20°	48738	51557	54383
25°	47532	50534	52765
30°	45004	47920	49524
35°	40873	42952	43342
40°	34884	34713	34552
45°	29303	26000	25188
50°	24471	17589	16706
55°	20599	10794	9805
60°	17432	5689	4932
65°	15098	2995	2393
70°	12551	1850	1297
75°	9276	1210	731
80°	7289	714	376
85°	5764	749	0



TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	5.6
10°-20°	216.3	16.1
20°-30°	319.5	23.8
30°-40°	329.2	24.5
40°-50°	227.4	16.9
50°-60°	112.1	8.3
60°-70°	45.4	3.4
70°-80°	16.2	1.2
80°-90°	3.3	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	611.3	45.5
0°-40°	940.6	69.9
0°-60°	1280.1	95.2
0°-90°	1345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1345.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	802	802	802	802	802	
5°	791	791	795	801	804	75
15°	737	745	767	792	804	207
25°	660	673	702	722	733	302
35°	513	526	539	542	544	318
45°	318	320	282	278	273	245
55°	181	174	95	89	86	164
65°	98	88	19	16	16	97
75°	37	31	5	3	3	41
85°	8	6	1	0	0	9
90°	0	0	0	0	0	



TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7
2.5°	799.8	796.9	798.8	794.9	799.8	794.9	795.9	796.9	795.9	796.9	797.8
5°	791.1	788.1	791.1	786.2	791.1	788.1	788.1	789.1	789.1	790.1	791.1
7.5°	779.4	776.5	779.4	774.6	780.4	777.5	777.5	779.4	778.5	779.4	781.4
10°	765.9	762.0	764.9	762.0	767.8	763.9	765.9	765.9	765.9	768.8	770.7
12.5°	751.4	747.5	751.4	746.5	752.3	749.4	750.4	753.3	754.3	756.2	757.2
15°	736.8	732.0	733.9	731.0	736.8	733.9	734.9	738.8	738.8	741.7	744.6
17.5°	718.4	714.6	718.4	714.6	719.4	717.5	719.4	722.3	722.3	725.2	728.1
20°	702.0	698.1	701.0	698.1	703.9	701.0	702.0	705.8	706.8	709.7	712.6
22.5°	681.6	678.7	680.7	677.8	683.6	681.6	682.6	686.5	687.5	689.4	694.2
25°	660.3	654.5	657.4	655.5	661.3	658.4	660.3	664.2	666.1	669.1	672.9
27.5°	629.4	626.5	628.4	628.4	633.2	630.3	631.3	635.2	638.1	641.0	645.8
30°	597.4	592.6	594.5	595.5	599.3	597.4	599.3	603.2	604.2	608.1	611.9
32.5°	556.7	554.8	558.7	556.7	558.7	558.7	559.6	562.5	564.5	566.4	571.3
35°	513.2	509.3	513.2	511.2	516.1	513.2	516.1	519.0	519.0	522.8	525.8
37.5°	465.7	460.9	462.8	462.8	464.8	463.8	463.8	468.6	469.6	472.5	475.4
40°	409.6	407.6	411.5	410.5	411.5	411.5	412.5	415.4	417.3	418.3	419.2
42.5°	359.2	360.2	361.2	361.2	361.2	361.2	361.2	365.0	364.1	367.0	367.9
45°	317.6	313.7	315.6	314.7	317.6	314.7	317.6	320.5	318.6	321.5	319.5
47.5°	275.0	275.0	275.0	274.0	275.9	275.0	276.9	277.9	277.9	277.9	276.9
50°	241.1	238.2	239.2	239.2	240.1	239.2	241.1	242.1	242.1	240.1	236.3
52.5°	208.2	207.2	207.2	209.1	209.1	208.2	208.2	208.2	208.2	205.3	203.3
55°	181.1	179.1	180.1	180.1	180.1	180.1	181.1	180.1	180.1	177.2	174.3
57.5°	156.9	154.9	154.9	154.9	155.9	154.9	154.9	154.9	154.0	151.0	147.2
60°	133.6	132.6	133.6	133.6	134.6	133.6	133.6	133.6	131.7	128.8	124.9
62.5°	114.3	114.3	114.3	115.2	115.2	114.3	114.3	113.3	112.3	108.4	104.6
65°	97.8	96.8	97.8	97.8	98.8	98.8	97.8	96.8	95.9	92.0	88.1
67.5°	81.3	80.4	81.3	81.3	82.3	81.3	81.3	81.3	78.4	76.5	72.6
70°	65.8	64.9	64.9	64.9	65.8	63.9	64.9	64.9	62.9	60.0	56.2
72.5°	50.3	50.3	50.3	50.3	50.3	50.3	49.4	49.4	47.4	44.5	42.6
75°	36.8	36.8	37.8	37.8	36.8	36.8	36.8	35.8	34.9	32.9	31.0
77.5°	27.1	27.1	27.1	27.1	26.1	26.1	26.1	25.2	24.2	23.2	21.3
80°	19.4	19.4	19.4	18.4	19.4	18.4	18.4	18.4	16.5	15.5	14.5
82.5°	13.6	12.6	12.6	12.6	12.6	12.6	12.6	11.6	11.6	10.7	9.7
85°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.8	5.8	5.8
87.5°	3.9	4.8	4.8	4.8	4.8	4.8	4.8	3.9	3.9	3.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7
2.5°	797.8	797.8	799.8	796.9	801.7	798.8	797.8	802.7	799.8	798.8	800.7
5°	791.1	792.0	793.0	791.1	795.9	793.0	793.0	797.8	795.9	794.9	797.8
7.5°	782.3	783.3	785.2	784.3	788.1	786.2	787.2	792.0	790.1	790.1	793.0
10°	771.7	773.6	775.6	775.6	780.4	778.5	778.5	784.3	782.3	783.3	787.2
12.5°	759.1	762.0	764.9	765.9	770.7	767.8	768.8	775.6	774.6	775.6	779.4
15°	745.5	749.4	752.3	752.3	758.1	755.2	758.1	764.9	763.0	766.8	771.7
17.5°	730.1	733.9	737.8	738.8	744.6	742.6	746.5	753.3	753.3	755.2	761.0
20°	715.5	720.4	722.3	725.2	731.0	730.1	732.0	739.7	739.7	742.6	748.4
22.5°	696.2	701.0	704.9	707.8	712.6	712.6	715.5	722.3	722.3	724.2	730.1
25°	674.9	680.7	683.6	686.5	691.3	690.4	693.3	699.1	700.0	702.0	707.8
27.5°	647.8	652.6	656.5	658.4	665.2	661.3	664.2	671.0	670.0	672.0	676.8
30°	613.9	618.7	622.6	622.6	628.4	628.4	631.3	634.2	634.2	636.1	640.0
32.5°	574.2	580.0	580.0	582.9	586.8	582.9	586.8	590.6	588.7	591.6	594.5
35°	528.7	531.6	532.5	532.5	535.4	534.5	533.5	536.4	534.5	539.3	542.2
37.5°	473.5	477.3	475.4	477.3	476.4	473.5	473.5	478.3	474.4	475.4	478.3
40°	420.2	420.2	419.2	414.4	415.4	412.5	411.5	412.5	408.6	407.6	411.5
42.5°	365.0	364.1	361.2	354.4	355.3	350.5	346.6	346.6	344.7	343.7	344.7
45°	315.6	312.7	307.9	300.2	298.2	294.3	286.6	284.7	281.8	281.8	282.7
47.5°	270.1	266.3	258.5	249.8	245.0	240.1	232.4	229.5	224.6	222.7	224.6
50°	232.4	225.6	215.9	203.3	198.5	192.7	184.9	180.1	175.3	173.3	172.3
52.5°	197.5	187.8	178.2	162.7	158.8	153.0	142.3	137.5	132.6	128.8	128.8
55°	167.5	158.8	145.2	130.7	124.9	119.1	108.4	101.7	96.8	94.9	93.0
57.5°	140.4	130.7	118.1	102.6	96.8	91.0	80.4	73.6	68.7	65.8	63.9
60°	118.1	107.5	94.9	81.3	74.6	68.7	58.1	51.3	46.5	43.6	41.6
62.5°	96.8	88.1	75.5	62.9	57.1	51.3	42.6	35.8	31.0	29.0	26.1
65°	81.3	72.6	61.0	50.3	45.5	39.7	32.0	26.1	22.3	19.4	17.4
67.5°	65.8	59.1	49.4	39.7	34.9	31.0	24.2	19.4	15.5	13.6	12.6
70°	52.3	45.5	37.8	30.0	27.1	23.2	18.4	13.6	11.6	9.7	8.7
72.5°	38.7	33.9	28.1	22.3	19.4	17.4	12.6	10.7	7.7	6.8	5.8
75°	28.1	24.2	20.3	15.5	13.6	12.6	9.7	6.8	5.8	4.8	3.9
77.5°	19.4	17.4	13.6	10.7	9.7	8.7	6.8	4.8	3.9	2.9	2.9
80°	12.6	10.7	8.7	6.8	6.8	5.8	3.9	2.9	2.9	1.9	1.9
82.5°	7.7	6.8	5.8	4.8	3.9	3.9	2.9	1.9	1.9	1.0	1.0
85°	4.8	3.9	2.9	2.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0
87.5°	1.9	1.9	1.9	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7
2.5°	800.7	800.7	802.7	799.8	801.7	801.7	803.6	799.8	801.7	802.7	804.6
5°	796.9	797.8	799.8	798.8	799.8	799.8	801.7	796.9	800.7	800.7	803.6
7.5°	793.0	793.0	794.9	794.0	795.9	796.9	798.8	794.9	798.8	798.8	801.7
10°	788.1	788.1	791.1	790.1	793.0	794.0	796.9	793.0	796.9	797.8	800.7
12.5°	781.4	782.3	785.2	785.2	788.1	790.1	793.0	791.1	795.9	796.9	800.7
15°	773.6	775.6	779.4	778.5	781.4	784.3	788.1	785.2	792.0	794.0	797.8
17.5°	763.9	765.9	768.8	768.8	771.7	773.6	778.5	776.5	782.3	783.3	788.1
20°	749.4	752.3	756.2	755.2	758.1	760.1	763.9	762.0	767.8	769.8	774.6
22.5°	732.0	733.9	736.8	736.8	739.7	741.7	745.5	742.6	748.4	749.4	753.3
25°	708.8	710.7	712.6	713.6	716.5	717.5	719.4	717.5	722.3	723.3	728.1
27.5°	678.7	679.7	682.6	682.6	684.5	685.5	688.4	684.5	691.3	691.3	694.2
30°	642.9	641.9	645.8	643.9	645.8	645.8	648.7	646.8	651.6	649.7	652.6
32.5°	595.5	597.4	597.4	595.5	599.3	598.4	598.4	596.4	599.3	600.3	602.2
35°	540.3	543.2	543.2	544.2	545.1	542.2	543.2	537.4	542.2	543.2	544.2
37.5°	480.2	477.3	479.3	476.4	481.2	475.4	475.4	471.5	475.4	475.4	476.4
40°	411.5	410.5	412.5	410.5	409.6	408.6	406.7	403.8	407.6	405.7	408.6
42.5°	346.6	345.7	345.7	343.7	342.8	342.8	340.8	338.9	337.9	337.9	342.8
45°	279.8	281.8	279.8	278.9	280.8	278.9	279.8	275.9	277.9	275.9	277.9
47.5°	223.7	224.6	222.7	220.8	223.7	220.8	220.8	217.9	221.7	221.7	219.8
50°	173.3	172.3	170.4	172.3	171.4	171.4	171.4	168.5	170.4	167.5	169.4
52.5°	127.8	126.8	126.8	125.9	126.8	125.9	125.9	124.9	124.9	123.9	124.9
55°	93.0	92.0	90.0	90.0	90.0	91.0	90.0	89.1	89.1	88.1	89.1
57.5°	62.9	61.0	61.0	61.0	61.0	60.0	60.0	59.1	60.0	59.1	60.0
60°	40.7	40.7	38.7	38.7	38.7	38.7	38.7	37.8	38.7	38.7	38.7
62.5°	25.2	25.2	24.2	23.2	24.2	23.2	23.2	23.2	24.2	23.2	24.2
65°	16.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
67.5°	11.6	10.7	10.7	10.7	10.7	10.7	10.7	9.7	10.7	10.7	10.7
70°	7.7	7.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	3.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P252269

CATALOG NUMBER: LD6B20D010 EU6B10209727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	801.7	801.7	801.7	801.7	801.7	801.7	801.7	801.7
2.5°	801.7	802.7	800.7	801.7	799.8	801.7	802.7	804.6
5°	799.8	800.7	798.8	800.7	798.8	800.7	801.7	803.6
7.5°	797.8	799.8	797.8	799.8	797.8	799.8	800.7	802.7
10°	797.8	800.7	798.8	801.7	798.8	800.7	802.7	803.6
12.5°	797.8	800.7	799.8	801.7	800.7	802.7	804.6	806.5
15°	795.9	798.8	796.9	799.8	798.8	799.8	803.6	803.6
17.5°	785.2	788.1	788.1	790.1	790.1	793.0	794.9	796.9
20°	771.7	774.6	773.6	776.5	776.5	779.4	781.4	783.3
22.5°	751.4	755.2	754.3	757.2	756.2	758.1	762.0	761.0
25°	725.2	730.1	729.1	731.0	730.1	730.1	732.0	733.0
27.5°	693.3	696.2	695.2	697.1	695.2	697.1	699.1	700.0
30°	651.6	653.6	652.6	653.6	652.6	654.5	655.5	657.4
32.5°	601.3	604.2	601.3	603.2	602.2	602.2	606.1	604.2
35°	541.2	542.2	543.2	543.2	541.2	542.2	544.2	544.2
37.5°	474.4	479.3	473.5	476.4	475.4	475.4	475.4	478.3
40°	404.7	405.7	403.8	403.8	403.8	402.8	406.7	405.7
42.5°	338.9	339.9	338.9	336.0	336.9	336.9	339.9	336.0
45°	275.0	276.9	275.9	275.9	274.0	274.0	275.0	273.0
47.5°	217.9	219.8	216.9	217.9	215.9	217.9	216.9	218.8
50°	165.6	167.5	166.5	167.5	167.5	165.6	168.5	164.6
52.5°	123.9	124.9	123.9	123.0	122.0	122.0	123.9	123.0
55°	88.1	87.1	87.1	87.1	88.1	88.1	87.1	86.2
57.5°	59.1	59.1	58.1	58.1	59.1	57.1	58.1	57.1
60°	37.8	37.8	37.8	37.8	36.8	37.8	37.8	37.8
62.5°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
65°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
67.5°	9.7	10.7	10.7	10.7	9.7	9.7	9.7	9.7
70°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
72.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)